



FASANARA CAPITAL

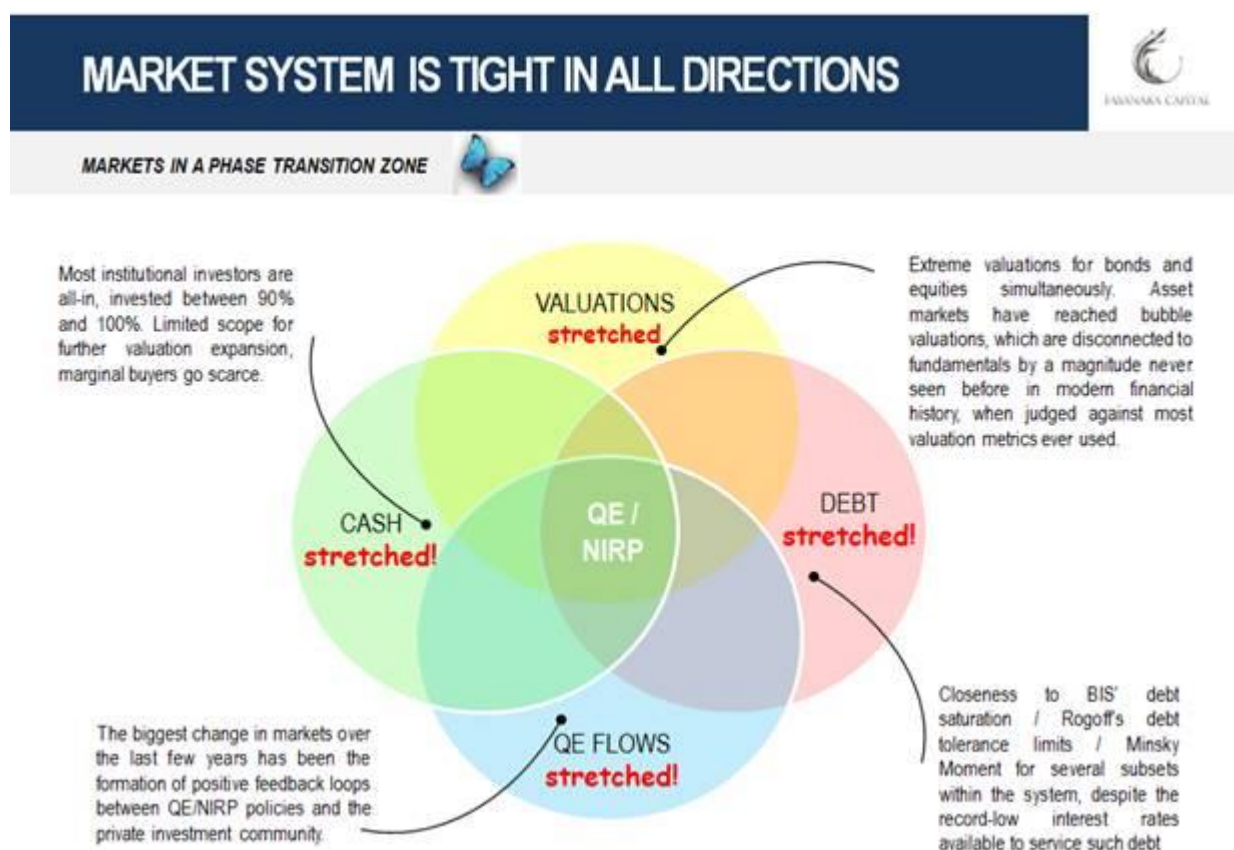
*"Learn how to see. Realize that everything connects to everything else."*  
— Leonardo da Vinci

### The Market System Is Tight In All Directions

*The Four Pillars Holding Markets Up Are Strained, All At The Same Time*

This note is intended to provide some more empirical evidence and data points for our thesis that markets stand at a critical juncture, ready to snap. Viewed as a combination of intertwined components, each component is showing growing signs of pressure and seem to be running out of road for further advancing. The synchronicity of them, more than any single component taken independently, is what should draw attention, as it compounds systemic risk.

Here are the four components, characterizing the basin of attraction for markets nowadays:



**What happens when the system is tight in its key possible directions of expansion?** That it expands no more. Stochastically, on one of the components a **tipping point** is reached, which **jumpstarts the autolytic effect**, spreading back through the vectors of the complex system, and snapping the **unstable equilibrium** into an alternative stable state. That is our [thesis](#).

[In this recent interview](#), we discuss the impending tipping points for markets due to a synchronicity of excess valuations, excess indebtedness, excessively low cash balances and a drawback in excessive public flows.

Let's give a cursory look across the four components. Again, the list is by no means exhaustive, but rather a work-in-progress (seemingly endless) collecting of data points, following on to our previous work of 'a long list of anomalies' [here](#) and [here](#).

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**VALUATIONS:** **stretched**, filled with anti-gravity anomalies, across Bonds and Equities.

### **Several European BBB-rated bonds trading at negative yields**

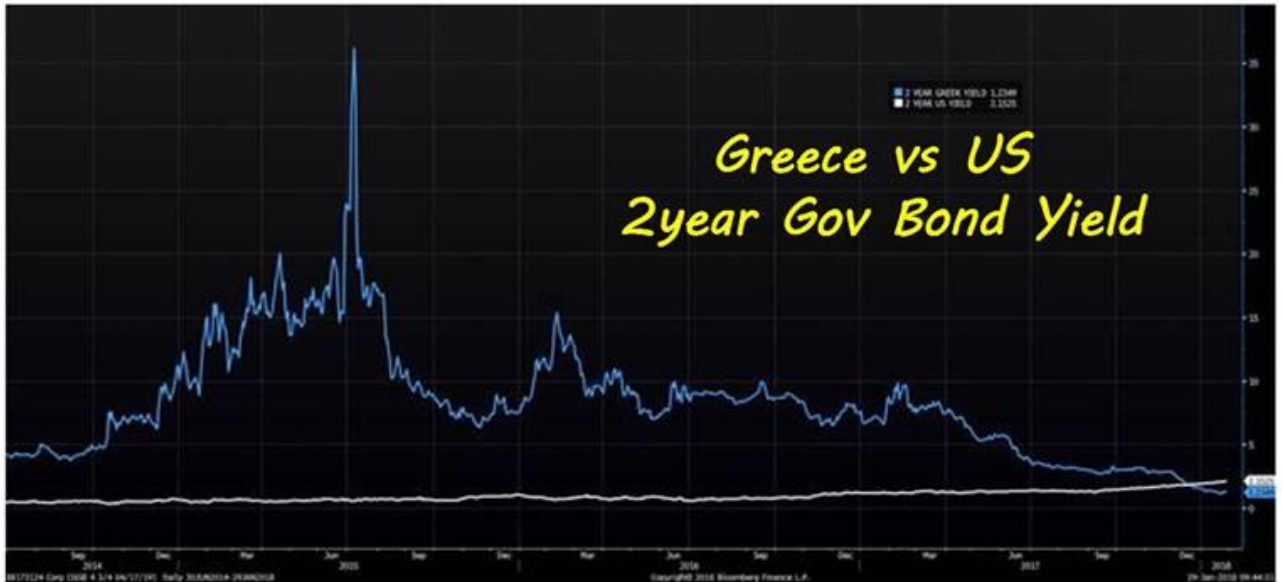
- In November 2017, Veolia successfully issued a 3-year EUR denominated bond with a negative yield of -0.026%, the first time for a BBB rated issuer (source: [MarketInsider](#))
- In Jan 2018, Auchan rated BBB+, issued a 2year floating rate note was priced at a yield of -29basis points, currently trading at -28bps (source: [Grant's](#))
- Anglo American 2020 bond (rated BBB-), currently trading at 14bps, after having spiked up to 14% just two years ago

**The 2 year Greek Government Bond is now trading almost 100bps lower than the 2year US yield. Greece is rated B- by Fitch and US is rated AAA by the same agency**

Is all this due to Central Bank flows? Yes of course. Make sense? Of course not. Indication of a sensible and sustainable market? Probably not. Probability that insanity (and instability) permeates to nearby asset classes, i.e. equity? High.



Source: Bloomberg, Fasanara Capital



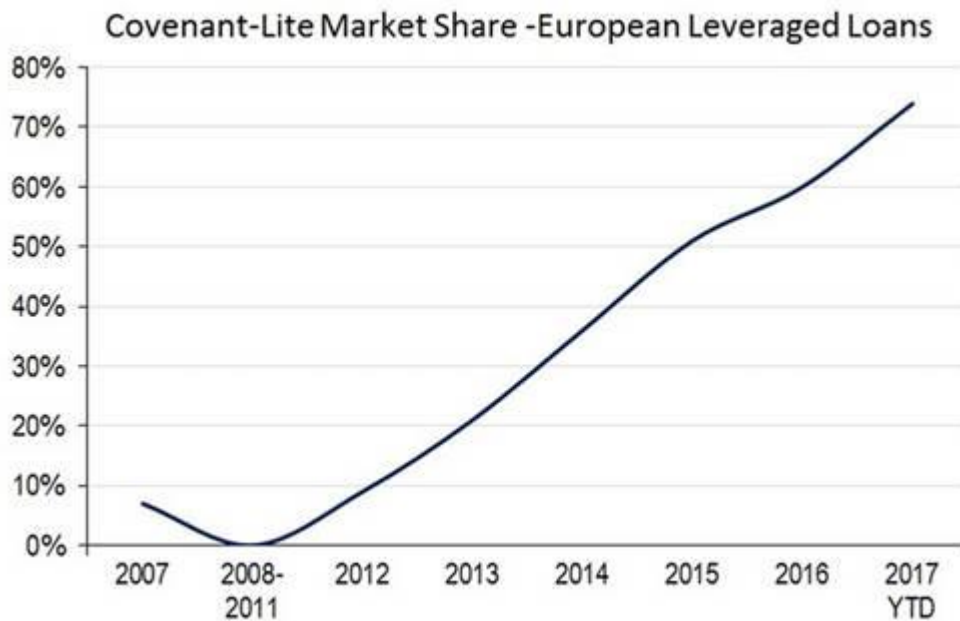
Source: Bloomberg, Fasanara Capital

**Cov-lite leveraged loan issuance at all-time highs**

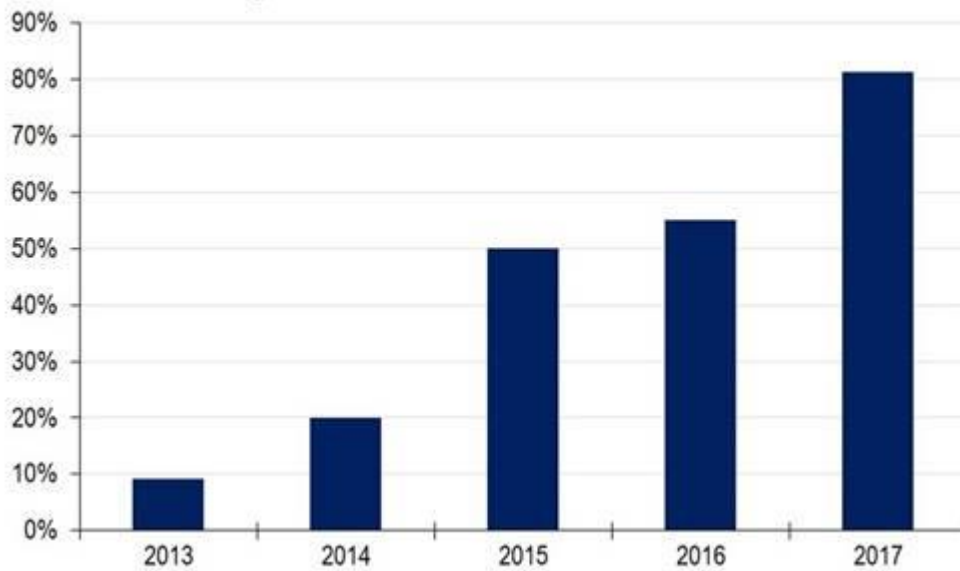
Covenant-lite is becoming not the exception but rather the norm in the Leveraged Loan markets, across the US and Europe.

Not only yields are minuscule, but the kind of investor protection at those yield is minimal by historical standards.

Counterintuitively, cov-lite are not even signature features of best borrowers: instead, defaults happen mostly within the cov-lite space.



### Percentage of defaulted issuers that are cov-lite in LLI



Source: [LCD, an offering of S&P Global Market Intelligence](#)

### The beauty of the New Economy: Netflix vs General Electric

Netflix gained 52% in January 2018 alone. With the result that Netflix is now days away from crossing General Electric in market cap, despite the latter being 10X larger in revenues. Buy! Bye..



Source: [Bloomberg, Fasanara Capital](#)

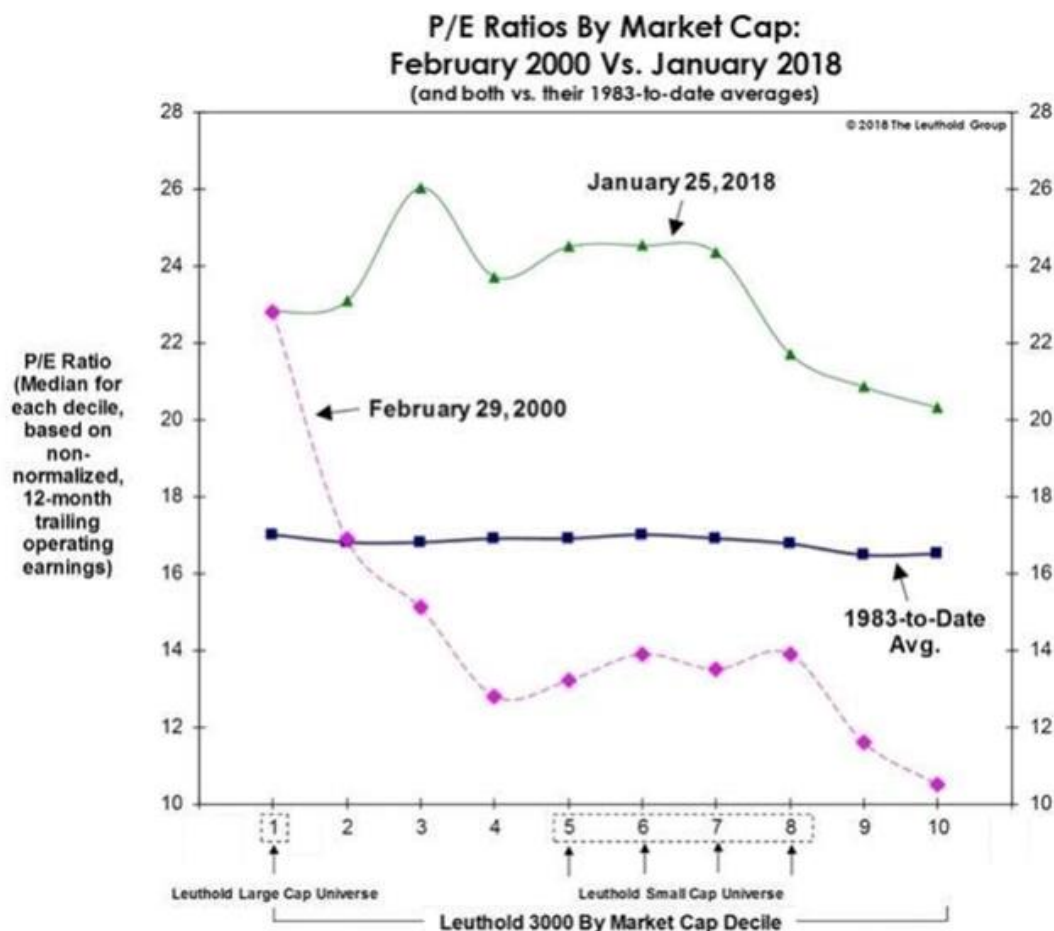
**Wait.. the Old Economy is even better! The chart shows valuation metrics (Enterprise Value on Revenues) for four old economy stocks: Mc Donald's, Caterpillar, Boeing and 3M**

The narrative being that valuations are oftentimes high because one has to pay for growth  
Except, for these four stocks, valuations are double as high as the peak of the past decades, while revenues are falling. Caveat emptor.



Source: Jesse Felder, [the Felder Report](#)

**P/E Ratios, for smaller caps, are more than double the levels seen in Feb 2000, just before the burst of the Tech Bubble**



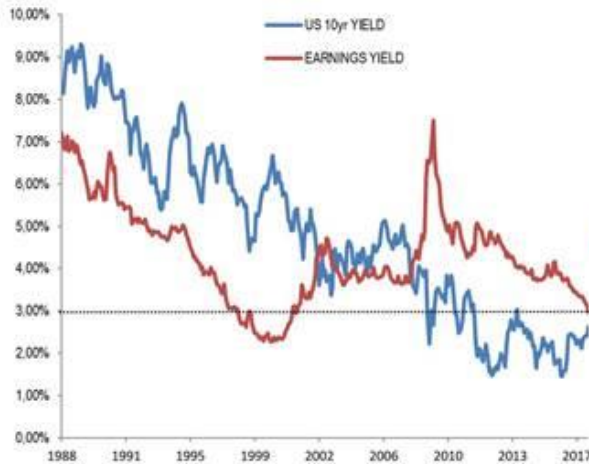
Christof Leisinge, [link](#), The Leuthold Group, [link](#)

As shown in our latest [FASANARA COOKIE](#), bond yields have just broken multi-decades downtrend lines. **Dividend yields are now below bond yields.** The rally in equities compressed dividend yields, all the while as bond yields rose to recent highs, resulting in the two crossing over for the first time in 10 years. In the chart below, current dividend yields are compared to near term yields obtainable on Treasuries. **CAPE-projected Earning Yields are now also close to bond yields.** The reverse of Shiller P/E, or CAPE, can be seen as a prospective Earning Yield for stocks. This yield is currently approaching bond yields of a comparable tenor. In the chart below, prospective earning yields are compared to long end yields obtainable on Treasuries.

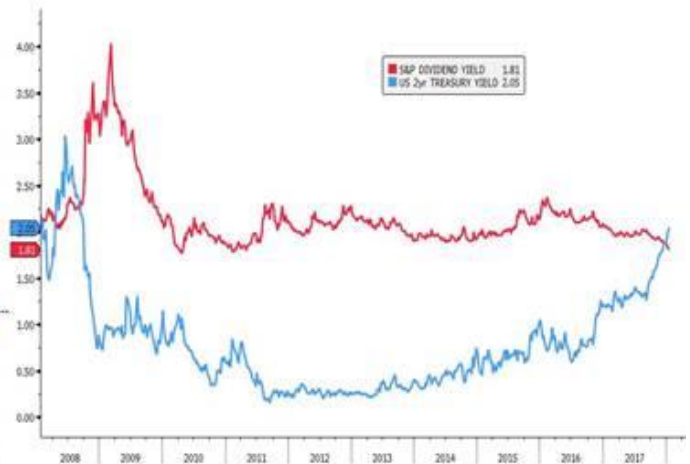
# EQUITIES-TO-BONDS RATIO AT CRITICAL JUNCTURE



BOND YIELDS OVERTAKING BOTH DIVIDEND YIELDS AND CAPE EARNINGS YIELDS



Source: Fasanara Capital Ltd  
Data Set:  
• US 10yr Treasury yield, source Bloomberg  
• Earnings yield= inverse of Shiller CAPE, source Yale University



Source: Fasanara Capital Ltd  
Data Set:  
• US 2yr Treasury yield, source Bloomberg  
• S&P Dividend Yield, source Bloomberg

Source: Fasanara Capital COOKIE

Measuring the Equity Bubble: an update of the 'Peak PEG' Ratio

On best revisions for GDP and earnings in 2018 after Tax reform, the S&P is now less expensive than before, at just 57% above historical average

Fasanara Capital Ltd, January 19th, 2018

[Link](#)

**Recently, we are also seeing more and more evidence of complacency extremism from investor legends:**

- Ray Dalio, from Davos, stated: ['If you're holding cash, you're going to feel pretty stupid'](#)
- Larry Fink, two day later, ['cash is killing your investment account'](#)
- Leon Cooperman: [Why I'm a bull](#) (this one is from August 2007, though)

(2)

**CASH BALANCES / POSITIONING: stretched.**

## - CASH LEFT TO RETAIL

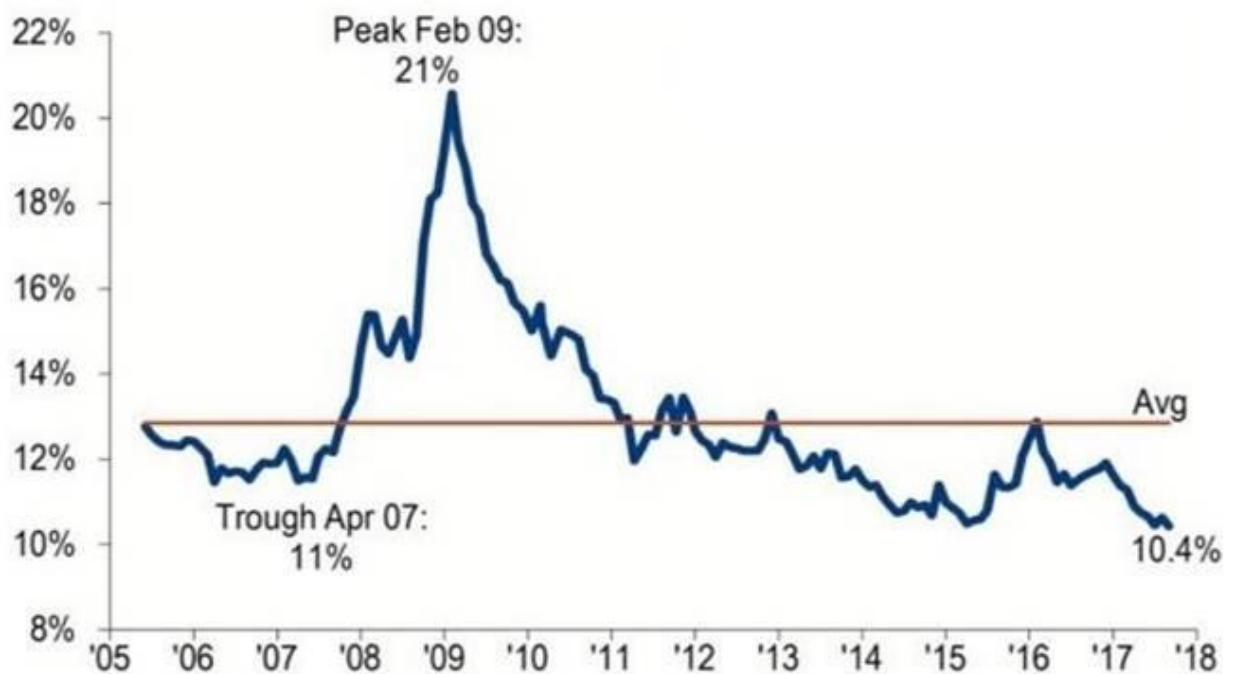
**"Equity investors are already near maximal allocations"**. There is only so much the market can rally if **equity investors are already near maximal allocations**. The table summarizes equity positioning of various types of institutional, as well as retail investors. These allocations are near historical highs, not leaving much room for further increases. Numbers are shown as historical 'percentiles'. Starting with retail investors one can notice that margin debt (measured as percentage of market capitalization) is at its highest point ever, which includes the 2000 tech bubble episode. The



percentage of US household wealth in equities is in its 94th percentile and above its 2007 peak, but slightly below 2000 levels. Sovereign wealth funds and US mutual funds are also near record levels. Pension Fund allocations appear to be in the 88% percentile, although there is some uncertainty around this number in adjusting for private asset and HF holdings. Global Hedge Funds' allocation (as measured by equity beta) are also near record highs, and Equity Hedge funds' allocation in their 93rd percentile (since 2005)." Marko Kolanovic, J.P. Morgan, 22 November 2017

Investor Type	Equity %-tile
Margin Debt / Mkt Cap.	100%
US Households	94%
US Mutual Funds	98%
Pensions	88%
Sov. Walth Funds	100%
Systematic Strategies	100%
All Hedge Funds	98%
Equity Hedge Funds	93%

**Merril Lynch's clients allocation to cash as % of AuM is lowest in over a decade.** We also know of anecdotal evidence of large private banking teams with 1% of clients' money left in cash

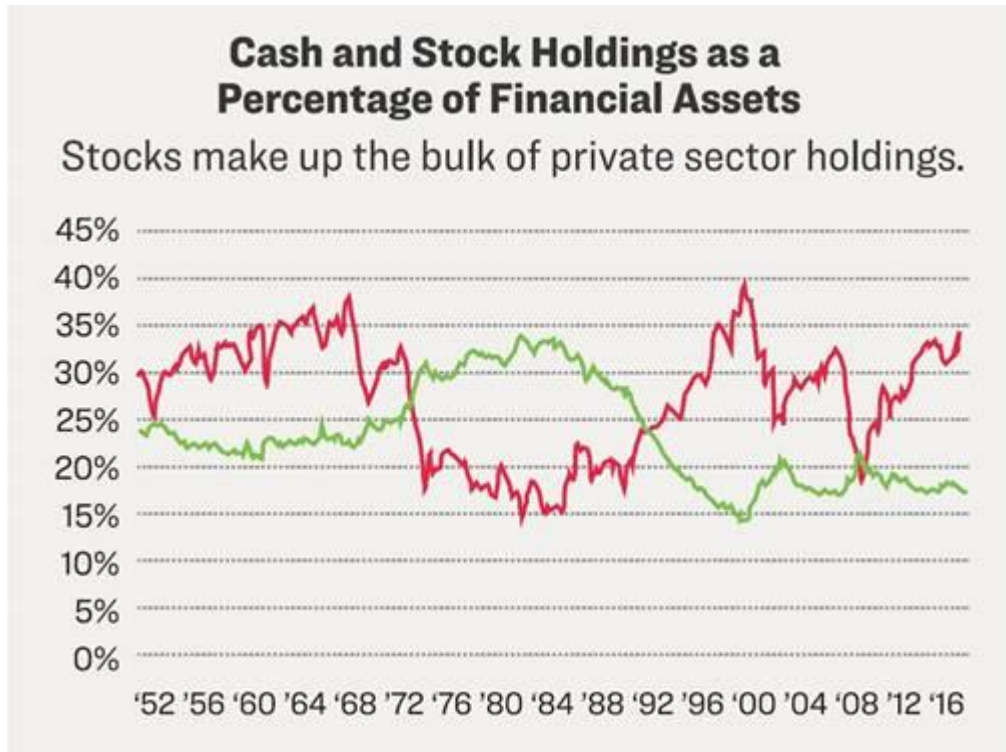


Source: BofAML Global Investment Strategy, BAC Data

**There has been a clear divergence between cash and stock holdings in the private sector as a percentage of financial assets**

What matters is cash vis-a-vis financial assets. The valuation of “cash on the sidelines” works through stock prices. As prices move up and cash prices stay the same, cash naturally becomes a smaller part of the asset allocation mix of households and companies.

Cash today (green line below) makes up only 17% of the average private sector portfolio, almost half of what seen at the beginning of the 80s and close to the all-time lows of 15% experienced at the end of the nineties.



Source: Gerring Capital Partners, Federal Reserve, [The Epoch Times](#)  
Also see Zerohedge: [Destroying The Myth Of 'Cash On The Sidelines'](#)

**The US personal saving rate dipped below levels last seen at the end of 2007, before the GFC started.**

Few days ago, David Rosenberg [noted](#) the decline in savings rate from 3.3% to 2.6%. If it had stayed the same, real PCE would have been 0.8% (annualized) instead of 3.8% and GDP would have been 0.6% instead of 2.6%. Numbers can look even worse if we consider last reading at 2.4%



Source: Bloomberg

**It now takes the average worker 129 hours to purchase the index level of the S&P.**

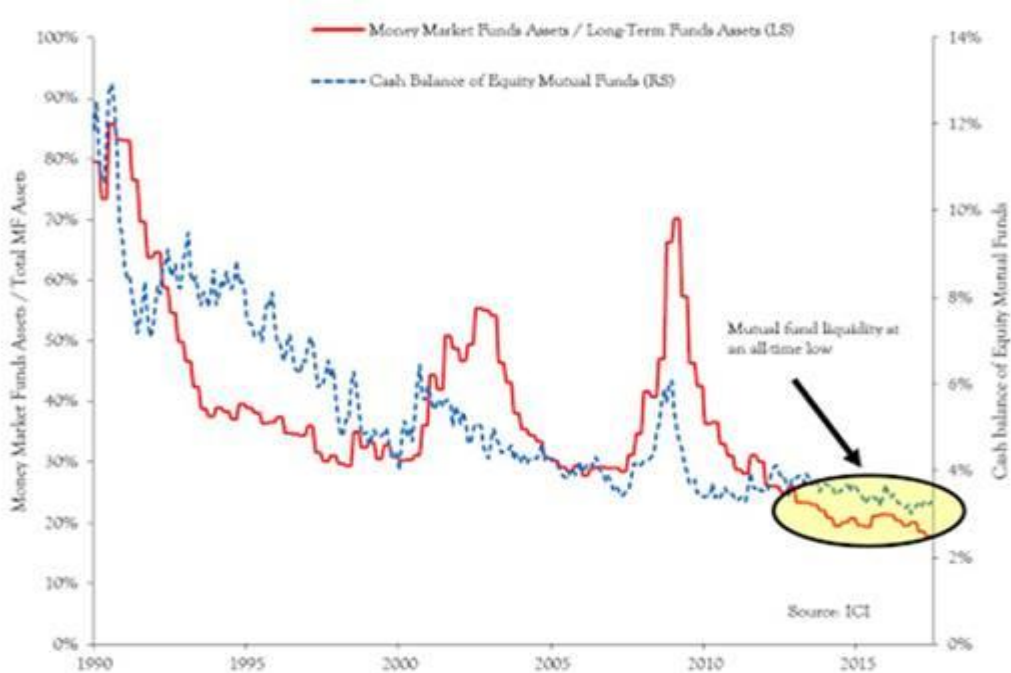
That is the highest multiple of all-time, exceeding the previous peak of 108 hours when the tech bubble was fully inflated in March 2000.



Source: Plutos, Seeking Alpha

- **CASH LEFT TO INSTITUTIONAL INVESTORS**

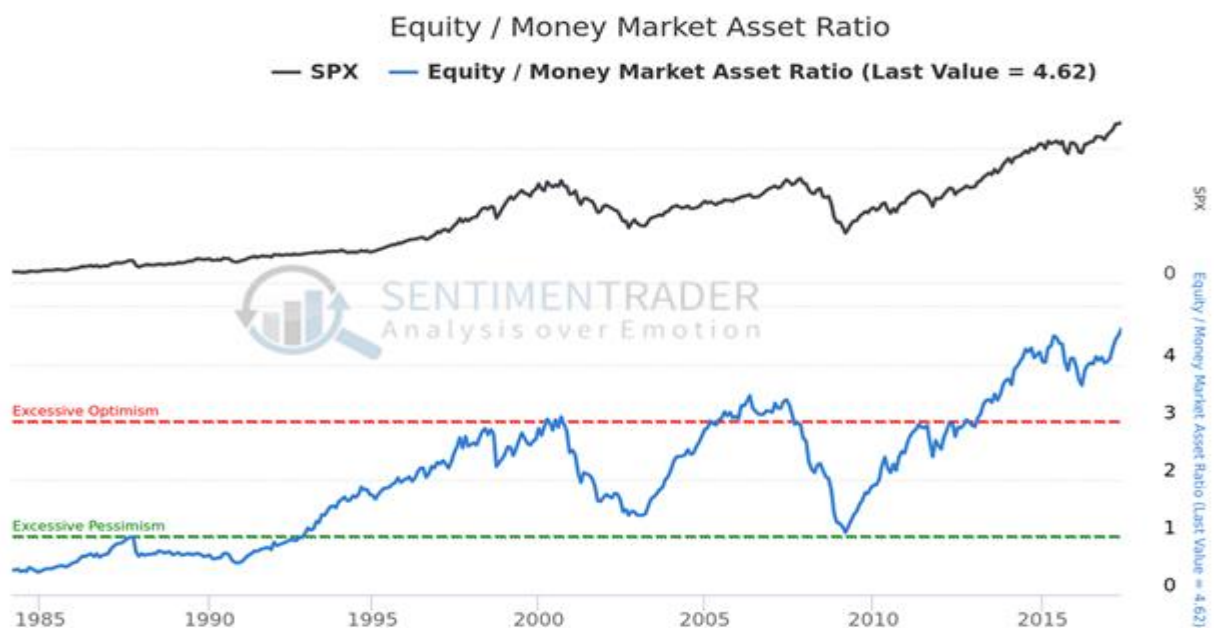
**Mutual Funds cash balances are at all time lows of 3.3%**



Source: Zerohedge, Intl-FC Stone  
[Mutual Fund Cash Hits All Time Lows | ZeroHedge](#)

**The ratio between the S&P and money markets is at all time highs**

The stock to cash ratio at 4.62 is the highest on record, well exceeding 2000 and 2007



Source: Zerohedge, SentimenTrader  
[Destroying The Myth Of 'Cash On The Sidelines' | ZeroHedge](#)

**As we learn from Jim Grant, last month Calpers (US largest pension Fund with over \$346bn portfolio) increased its allocation to both equities and bonds, and its cash holdings dropped from 4% to just 1% of total portfolio.** The only dissenter in the vote, board member JJ Jelincic “has advocated for a higher risk portfolio,” while board member Richard Costigan concurred “I am concerned, we’re leaving money on the table.”

- **CASH LEFT TO CORPORATES**

**Rising cash balances mask a more than proportional rise in gross debt**

Total debt outstanding for US corporates continues to rise faster than cash on corporate balance sheets, resulting in rising net debt

Credit growth will not help much today as public debt exploded already to \$20tn (vs just \$8tn in 2006), and gross corporate debt reached \$7tn (vs just \$2tn in 2006)



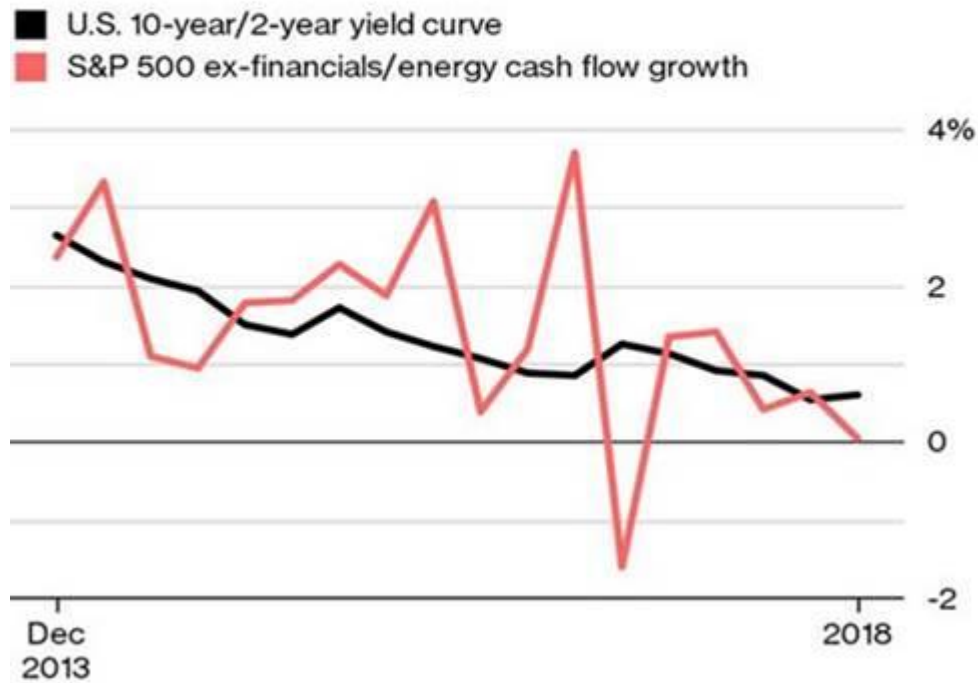
Source: Standard & Poor’s Financial Services LLC

### U.S operating cash flow growth is decreasing

“There’s been a “steady” decline in the growth of net operating cash flow in U.S. stocks, excluding the financial and energy sectors”, SocGen strategists Andrew Laphorne

## Cash Slow

U.S. operating cash flow growth ex-financials and energy is slowing



Source: [Bloomberg](#)

### (3)

**DEBT/LEVERAGE:** **stretched**, especially within pockets of the system.

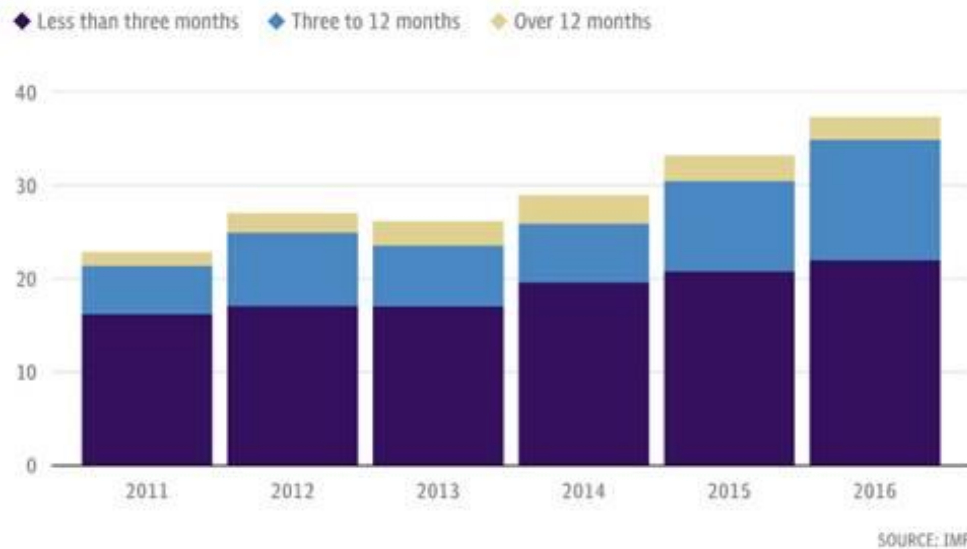
### The falling productivity of new credit lending (decreasing marginal effectiveness of lending) is visibly at play

Extreme indebtedness and closeness to BIS’ debt saturation points / Rogoff’s debt tolerance limits / Minsky Moment for several subsets within the system, despite the record-low interest rates available to service such debt: China, Turkey, Japan, Italy.

Here below the case of China, one chart amongst many:

### China's small banks relying on short-term capital to fund lending, like Lehman and Northern Rock

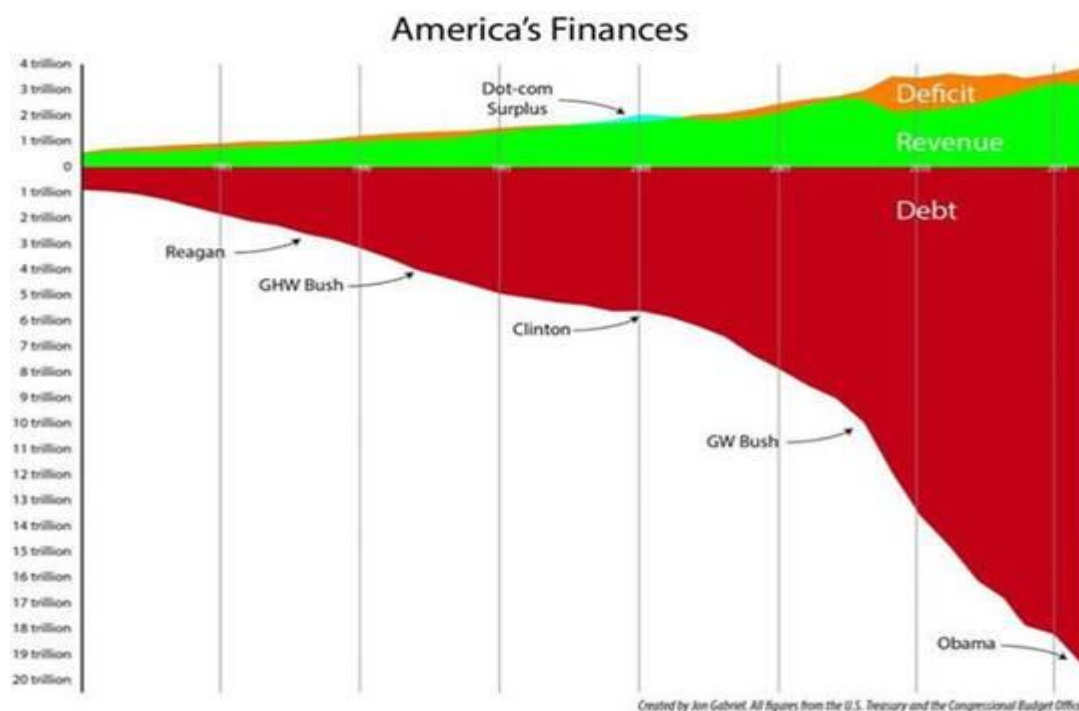
Percent of assets



Source: Ambrose Evans-Pritchard at [The Telegraph](#), IMF

### US National Debt is now above 20trillion USD, after a long run

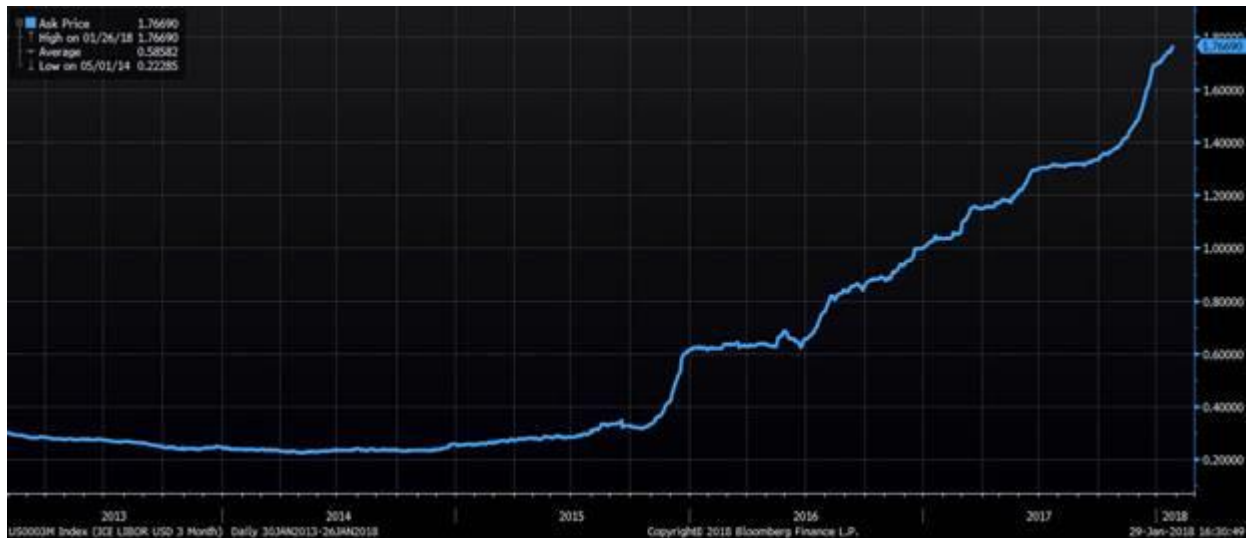
The list of data points for extreme indebtedness is long, not least the IIF metric of global debt on GDP of 327%, an all-time high. Here below we show graphically the exponential trajectory of US finances, just before tax cuts, infrastructure spending, rising deficit.



Source: Jon Gabriel. All figures from the U.S Treasury and Congressional Budget Office

### Floating-Rate Debt

Goldman estimates that more than 40% of the debt of Russell 2000 companies is floating (so dependent on Libor). Recent steep increase on the 3month Libor should command some attention



Source: Peter Boockvar, @pboockvar, Bloomberg, Fasanara Capital

### Rising rates in Emerging Markets

Everybody is currently focused on interest rates in EU and US which are at multi-year breakege point. But EM is where we are seeing the real action: **China 4%, Brazil 10%, India 8%**



Source: Bloomberg, Fasanara Capital



(4)

QE FLOWS/ PFL: **stretched**, and reversing.

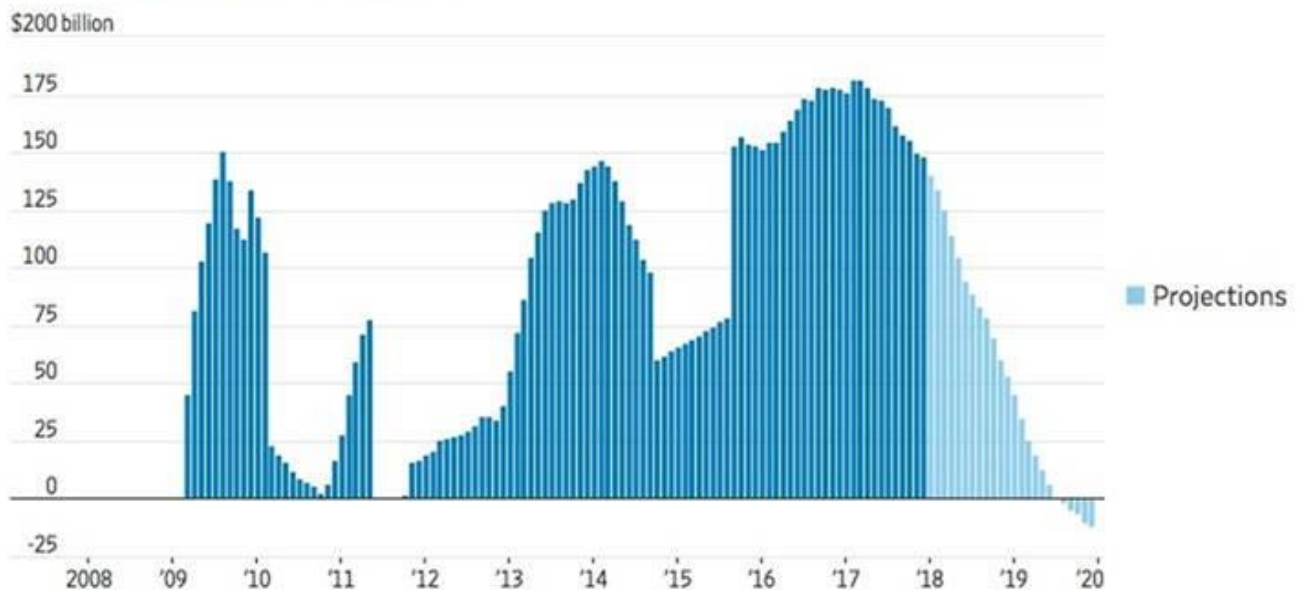
### **QE tide is receding**

What fuelled positive feedback loops in the last years is going to go in reverse in the next years. Asset purchases by major Central Banks (excluding China) are forecast to shrink by more than 70% this year, setting up a large mismatch between supply and demand in global debt markets

### **End of an Era**

Major central banks' net asset purchases to stimulate economic growth will fall rapidly this year and are expected to hit negative territory by summer 2019.

#### **Total net asset purchases, monthly**

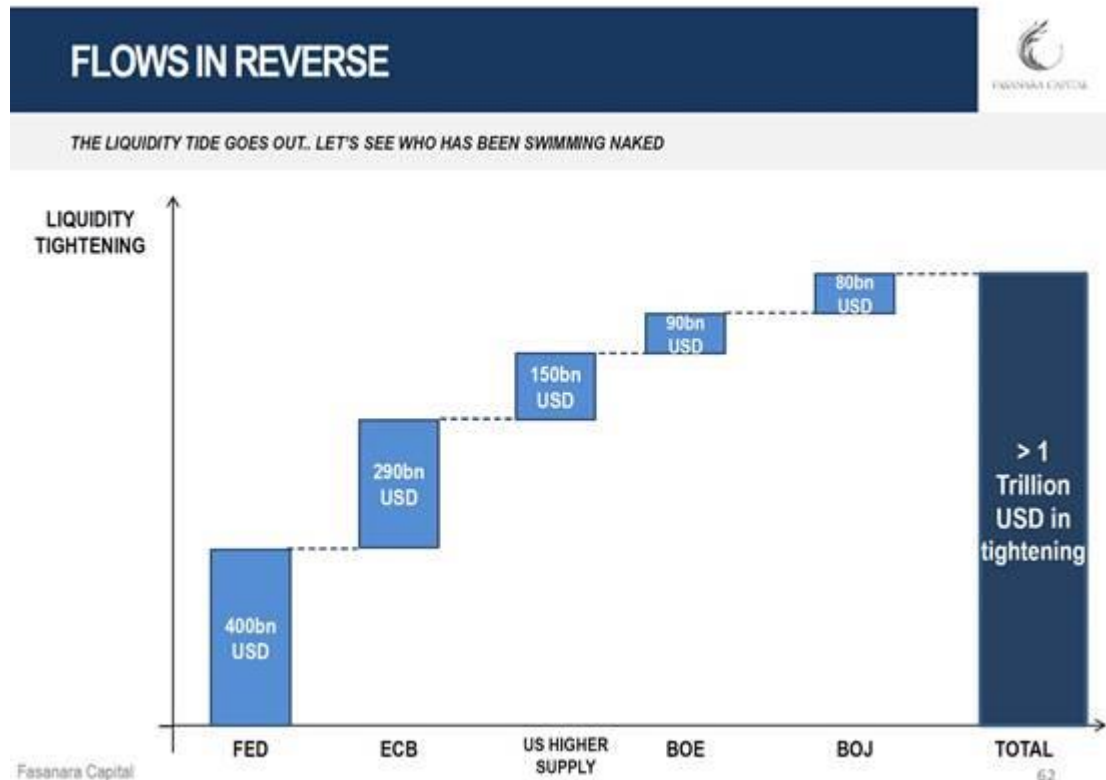


Note: Total purchases include the Bank of England, U.S. Federal Reserve, Bank of Japan and European Central Bank. January 2008-February 2009 and June-September 2011, amounts were between 0 and -\$0.05 billion.

Source: WSJ, Deutsche Bank

**It is reasonable to expect more than \$1tn in liquidity to be withdrawn from the global financial system in 2018 alone**

Only when the liquidity tide goes off do you see who has been swimming naked



Source: Fasanara Capital PRESENTATIONS | [Market Fragility – How to Position for Twin Bubbles Bust](#), 16<sup>th</sup> October 2017

## CONCLUDING REMARKS:

What happens when the system is tight at the same time across VALUATIONS, DEBT/LEVERAGE, CASH BALANCES, FLOWS? The system is tight in all directions, across all modules, which are also tightly intertwined. The probability of a critical transitioning is high when no modules within the system can pick up the slack and stabilise the equilibrium. Analysed through the lenses of Complex Theory, this may qualify as a phase transition zone, where a dramatic regime shift is impending.

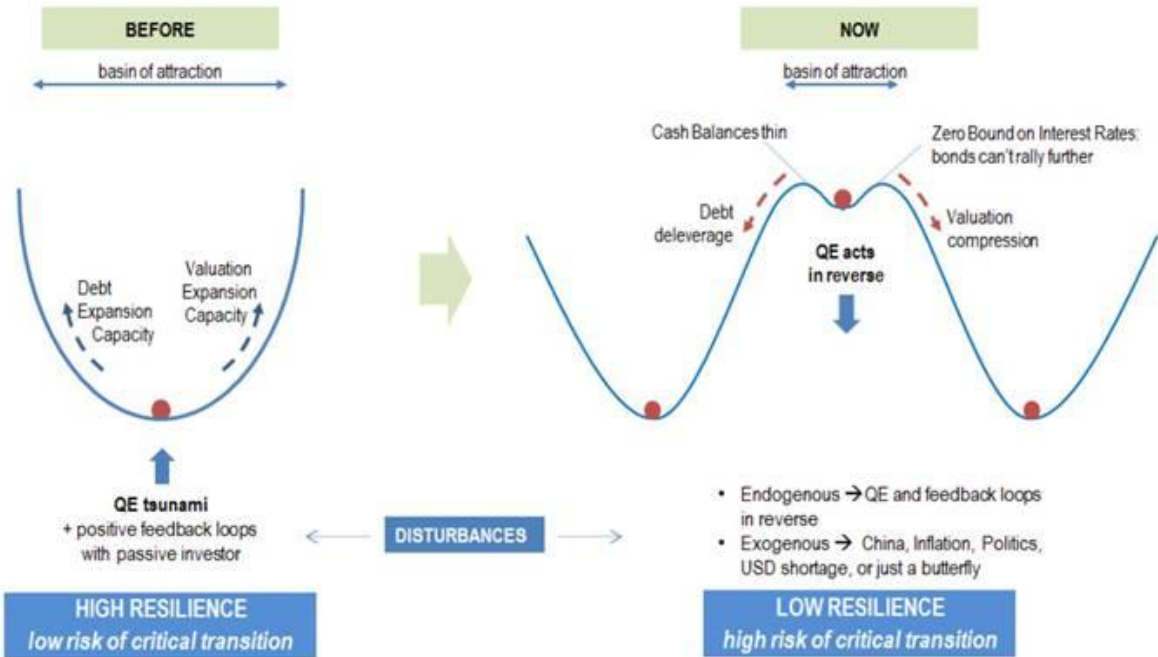
Markets are in an uncomfortable spot, where not much escape is available via new lending, not much escape via higher valuations, not much escape with new QE, not much escape with more leverage, not much escape with more cash to deploy. **No escape does not necessarily imply a crash. However, treading water on the edge of chaos is dangerous, as any small perturbation has the potential to trigger a critical transformation. An exogenous or endogenous trigger can easily push the equilibrium out of its small basin of attraction. A new equilibrium may be waiting to assert itself, nearby, through chaos.**

We are in a phase transition zone, where financial markets are fragile sit on the 'edge of chaos'. **This is the magic zone where rare events become typical.**

# MARKETS ON THE EDGE OF CHAOS



MARKETS THROUGH THE PRISM OF COMPLEX THEORY: LOW RESILIENCE, TIPPING POINTS AND CRITICAL TRANSFORMATION



Source: Fasanara Capital SCENARIOS | [Fragile Markets On The 'Edge Of Chaos'](#), January 10th, 2018

Francesco Filia  
CIO Fasanara Capital Ltd

[www.fasanara.com](http://www.fasanara.com)

40 New Bond Street  
London, W1S 2RX

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